

Name: \_\_\_\_\_

### Worksheet – Perfect Square Trinomials – Version 1

Directions: Please fully factor the following expressions.

1.  $x^2 + 20x + 100$

$$(x+10)(x+10)$$

2.  $y^2 - 12y + 36$

$$(y-6)(y-6)$$

3.  $9x^2 + 6x + 1$

$$(3x+1)(3x+1)$$

4.  $25x^2 + 80x + 64$

$$(5x+8)(5x+8)$$

5.  $x^2 + 2xk + k^2$

$$(x+k)(x+k)$$

6.  $x^8 + 18x^4 + 81$

$$(x^4+9)(x^4+9)$$

7.  $x^2y^8 - xy^4 + 1$

$$(xy^4-1)(xy^4-1)$$

8.  $8x^2 + 24x + 18$

$$2(4x^2+12x+9)$$
$$2(2x+3)(2x+3)$$

9.  $25a^2 + 50ab + 25b^2$

$$25(a^2+2ab+b^2)$$
$$25(a+b)(a+b)$$

10.  $x^2 - 6x + 9$

$$(x-3)(x-3)$$